

**Appendix D:  
Noise Impact Analysis**

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### Mobile Construction Activity Noise Calculation

| Receptor: Nearest Residences East of the project |                       | Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements |          |                 |                      |                  |                    |                  |      |             |    |
|--|-----------------------|---|----------|-----------------|----------------------|------------------|--------------------|------------------|------|-------------|----|
| No.  | Equipment Description | Reference (dBA) 50 ft   | Quantity | Usage factor[1] | Distance to Receptor | Ground Effect[2] | Shielding (dBA)[3] | Calculated (dBA) |      | Energy      |    |
|  |                       | Lmax  |          |                 |                      |                  |                    | Lmax             | Leq  |             |    |
| 1  | Backhoe               | 85  | 1        | 40              | 50                   | 1                | 0                  | 85.0             | 81.0 | 126491106.4 |    |
| 2  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 3  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 4  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 5  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 6  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 7  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 8  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 9  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 10   |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| Notes:   |                       |   |          |                 |                      |                  |                    | Lmax[4]          | 85   | Leq         | 81 |

- [1] Percentage of time activity occurs each hour
- [2] Soft ground terrain between project site and receptor.
- [3] Shielding due to terrain or structures
- [4] Calculated Lmax is the Loudest value.

### Mobile Construction Activity Noise Calculation

| Receptor: Nearest Residences West of the project |                       | Noise Level Calculation Prior to Implementation of Noise Attenuation Requirements |          |                 |                      |                  |                    |                  |      |             |    |
|--|-----------------------|---|----------|-----------------|----------------------|------------------|--------------------|------------------|------|-------------|----|
| No.  | Equipment Description | Reference (dBA) 50 ft   | Quantity | Usage factor[1] | Distance to Receptor | Ground Effect[2] | Shielding (dBA)[3] | Calculated (dBA) |      | Energy      |    |
|  |                       | Lmax  |          |                 |                      |                  |                    | Lmax             | Leq  |             |    |
| 1  | Backhoe               | 85  | 1        | 40              | 70                   | 1                | 3                  | 79.1             | 73.6 | 23103399.31 |    |
| 2  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 3  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 4  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 5  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 6  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 7  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 8  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 9  |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| 10   |                       |   |          |                 |                      |                  |                    |                  |      |             |    |
| Notes:   |                       |   |          |                 |                      |                  |                    | Lmax[4]          | 79   | Leq         | 74 |

- [1] Percentage of time activity occurs each hour
- [2] Soft ground terrain between project site and receptor.
- [3] Shielding due to terrain or structures
- [4] Calculated Lmax is the Loudest value.

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